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1999

ANNUAL SURVEY OF DOMESTIC OIL AND GAS RESERVES U.S. DEPARTMENT OF ENERGY CALENDAR YEAR 1999

Form Approved OMB No. 1905-0057 Expires 12/31/2000

This report is mandatory under Public Law 93-275. Failure to comply may result in criminal fines, civil penalties and other sanctions as provided by law. For the sanctions and the provisions concerning the confidentiality of information submitted on this form, see page 2 of the Instructions. Public reporting burden for this collection of information is estimated to average from 62 to 333 hours per response, including the time of reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Energy Information Administration, Statistical Methods Group EI-70, Washington, DC 20585; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

COVER PAGE **IDENTIFICATION** 2. I.D. Code FOR DOE USE ONLY Were you an operator (see definition of an operator, p.1) of one or more oil or gas wells on December 31, 1999? No... Complete only items 3 through 22 below and return this page with a letter stating when operations ceased and what became of the wells you operated to U. S. Department of Energy Washington, DC 20585 0 0 0 0 Yes... Complete the attached forms and return them to U. S. Department of Energy Washington, DC 20585 (2) If information to the left is incorrect or is missing, enter correct information below. 3. Name Address 7. Zip Code City 6. State 8. FIN Check if Attestor's Social Security Number Name of Contact Person 10. Telephone Number of Contact Person Area Code (COMPANY IDENTIFICATION PARENT 11. Is there a parent company which exercises ultimate control over 12. Name your company? 13. Address No... Answer 18 thru 22 Yes... Answer 12 thru 22 14. Citv 15. State 16. Zip Code 17. Parent Company EIN 18. What is the total number of pages (including this page) submitted in this filing? **ATTESTATION** (This report must be attested to by a responsible official of the company.) I hereby swear or affirm that I have read the report and am familiar with its contents, and that to the best of my knowledge, information, and belief, the information provided and appended is true and complete. 19. Name of Attestor (Please print) 21. Signature 20. Title 22. Date Title 18 USC 1001 makes it a criminal offense for any person knowingly and willingly to make to any Agency or Department of the United States any false, fictitious or fraudulent statements as to any matter within its jurisdiction

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ANNUAL SURVEY OF DOMESTIC OIL AND GAS RESERVES

Form Approved OMB No. 1905-0057 Expires 12/2000

SCHEDULE A - OPERATED PROVED RESERVES, PRODUCTION, AND RELATED DATA BY FIELD (Report All Liquid Volumes in Thousands of Barrels [Mbbl] at 60°F;
Report All Volumes of Natural Gas in Millions of Cubic Feet [MMcf] at 60°F and 14.73 psia)

1.0 OPERA	TOR AND	REPORT II	DENTIFICAT	TION DATA	\															
1.1 OPERATOR I.D. CODE 1.2 OPERATOR NAME				REP			PORT D	ORT DATE 1.3 ORIGINAL			NAL 1.4 AMENDED			E	FOR DOE U		USE ONLY			
								12	31	99										
2.0 FIELD D	ATA (OPER	ATED BASI	S)																	
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13. ASSOCIA	TED-DISSOL\	/ED GAS(MM	cf)																	
14. NONASSO	OCIATED GAS	(MMcf)																		
15. LEASE CO	ONDENSATE	(Mbbl)																		
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14. NONASSOCIATED GAS (MMcf)																	\bot			
15. LEASE CONDENSATE (Mbbl)																				

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ANNUAL SURVEY OF DOMESTIC OIL AND GAS RESERVES SCHEDULE B - FOOTNOTES

Form Approved OMB No. 1905-0057 Expires 12/2000

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ANNUAL SURVEY OF DOMESTIC OIL AND GAS RESERVES FORM EIA-23

Field Survey Instructions 1999

U.S. Department of Energy Energy Information Administration Office of Oil and Gas

U.S. Department of Energy Energy Information Administration Office of Oil and Gas

ANNUAL SURVEY OF DOMESTIC OIL AND GAS RESERVES FORM EIA-23 CALENDAR YEAR 1999

Field Survey Package

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For Information, Assistance, or Additional Forms, Contact the EIA-23 Coordinator at 1-800-879-1470 8:30 a.m. – 5:00 p. m. CST FAX (202) 586-1076



U.S. DEPARTMENT OF ENERGY

Energy Information Administration Washington, DC 20585 Form Approved OMB Number: 1905-0057 Expiration Date: 12/31/00

ANNUAL SURVEY OF DOMESTIC OIL AND GAS RESERVES FORM EIA-23 CALENDAR YEAR 1999

GENERAL INSTRUCTIONS

A. PURPOSE

The Energy Information Administration (EIA) of the Department of Energy (DOE) seeks, with Form EIA-23, to gather and summarize credible and timely data regarding proved reserves and production of crude oil, natural gas, lease condensate and other related matters. The Government will use the resulting information to develop national and regional estimates of proved reserves of domestic crude oil and natural gas liquids and to facilitate national energy policy decisions.

B. WHO MUST SUBMIT

Each operator of domestic oil and/or gas wells as of December 31, 1999 that has been selected <u>must file</u> Form EIA-23. The definition of an operator as used in these instructions and forms is as follows:

Operator: The person responsible for the management and day-to-day operation of one or more crude oil and/or natural gas wells on December 31, 1999. The operator is generally a working interest owner or a company under contract to the working interest owner(s). Wells included are those which have proved reserves of crude oil, natural gas and/or lease condensate in the reservoirs associated with them, whether or not they are producing. Wells abandoned during the year are also to be considered "operated" on December 31.

Note that as defined, day-to-day physical operation of a well or wells does not alone qualify a person as the operator. Physical operation may occasionally be divorced from operatorship, such as in the instance of manipulation of swing wells by a gas pipeline company representative, or the manipulation and maintenance of wells located on an offshore platform by the platform manager. While the operator's own personnel usually perform such duties, the key factor is that the operator is the person who makes management decisions regarding the well(s) in question on behalf of the owner(s). Such decisions might include, for example, deciding what flow rates can be sustained without reservoir damage; deciding whether well(s) should be shutin, worked over, or abandoned; whether additional or replacement wells should be drilled into a reservoir; whether a waterflood program should be initiated; or whether additional or different production equipment should be installed.

If in a particular instance you are **not** certain whether you are the operator, contact the EIA-23 Coordinator for assistance in making this determination. If you are **not** the operator (perhaps a former operator or solely a working or royalty interest owner), you should complete and sign the Cover Page and return it to DOE along with a letter stating when operations ceased and what became of the wells you previously operated.

Each operating affiliate of a parent company must file its own Form EIA-23. The parent company must file only if it is an operator itself. If no parent company exercises ultimate control over your company, complete and sign the Cover Page and go to **"C. What Must Be Submitted"**.

C. WHAT MUST BE SUBMITTED

Production data and estimates of proven reserves of crude oil, natural gas and lease condensate are required of each operator selected. This survey segregates selected operators into three categories, according to the annual production of hydrocarbons from wells which they operated on December 31, 1999. The three size categories are as follows:

Category I - Large Operators: Operators who produced 1.5 million barrels or more of crude oil or 15 billion cubic feet or more of natural gas. Production and proven reserves estimates are required from all Category I operators. These operators must file:

- Cover Page/Attestation
- Schedule A Operated proved reserves, production, and related data by fields
- Schedule B Footnotes

Category II - Intermediate Operators: Operators who produced at least 400,000 barrels of crude oil or 2 billion cubic feet of natural gas, but less than Category I operators. Production data are required from all Category II operators. Proved reserves estimates are required only if such data exists in company records. To the extent that these operators do not have proved reserves estimates associated with one or more specific properties, they must report their production data separately according to "production from properties for which reserves were estimated" and "production from properties for which reserves were not estimated." These operators must file:

- Cover Page/Attestation
- Schedule A
- Schedule B Footnotes

Category III - Small Operators: Operators who produced less than the Category II operators. Category III operators are required to file:

- Cover Page/Attestation
- · Summary Report.

If you have received the Field Form (Schedule A), but your total operated production is at the Category III level, contact the EIA-23 Coordinator to obtain the appropriate form.

If you were **not** an operator of oil and gas wells as of December 31, 1999, you are required to submit:

- Cover Page/Attestation.
- Letter stating when operations ceased and what became of the wells operated.

Filing requirements are based on operator category. Production refers to the total calendar year production from all domestic oil and/or gas wells you operated on December 31, 1998, including wells abandoned during the year.

D. WHEN AND WHERE TO SUBMIT

The completed 1999 forms must be submitted on or before April 1, 2000.

Completed forms should be submitted to:

United States Department of Energy Energy Information Administration, EI-45 Mail Station: 2G-024 Forrestal 1000 Independence Ave., SW Washington, DC 20585

For your convenience, a self-addressed label has been enclosed. You can also FAX your completed form by dialing (202) 586-1076. For information concerning requests for extension of time to file or for exception from filing Form EIA-23, contact the EIA-23 Coordinator toll-free at 1-800-879-1470 from 8:30 a.m. to 5:00 p.m. CST.

E. RECORD KEEPING REQUIREMENTS

All records necessary to reconstruct the data reported on this form must be kept at the reporting site or on file and available for a period of three (3) years from the filing due date.

EIA will follow this survey with efforts to perform Quality Assurance on the data, assessing the accuracy of the resulting information. Respondents may encounter two principal Quality Assurance activities:

- Government personnel will make or supervise independent reserve estimates on a sample basis.
- A sample of operators will be visited to review the data submitted.

EIA recognizes that the judgment of geologists and petroleum engineers is required in the reserve estimation process, and that as a result, proved reserves are estimates rather than precise quantitative measurements.

F. SANCTIONS

The timely submission of Form EIA-23 by those required to report is mandatory under Section 13 (b) of the Energy Information Administration Act of 1974 (FEAA) (Public Law 93-275), as amended. Failure to respond may result in a civil penalty of not more than \$2,500 for each violation, or a fine of not more than \$5,000 for each willful violation. The government may bring a civil action to prohibit reporting violations which may result in a temporary restraining order or a preliminary or permanent injunction without bond. In such civil action, the court may also issue mandatory injunctions commanding any person to comply with these reporting requirements.

G. CONFIDENTIALITY

The Office of Legal Counsel of the Department of Justice concluded on March 20, 1991, that the Federal Energy Administration Act requires the Energy Information Administration to provide company-specific data to the Department of Justice, or to any other Federal agency when requested for official use, which may include enforcement of Federal law. The information contained on this form may also be made available, upon request, to another component of the Department of Energy (DOE); to any Committee of Congress, the General Accounting Office, or other Congressional agencies authorized by law to receive such information. A court of competent jurisdiction may obtain this information in response to an order.

The information contained on this form will be kept confidential and not disclosed to the public to the extent that it satisfies the criteria for exemption under the Freedom of Information Act (FOIA), 5 U.S.C. §552, the DOE regulations, 10 C.F.R. §1004.11, implementing the FOIA, and the Trade Secrets Act, 18 U.S.C. §1905.

Upon receipt of a request for this information under the FOIA, the DOE shall make a final determination whether the information is exempt from disclosure in accordance with the procedures and criteria provided in the regulations. To assist us in this determination, respondents should demonstrate to the DOE that, for example, their information contains trade secrets or commercial or financial information whose release would be likely to cause substantial harm to their company's competitive position. A letter accompanying the submission that explains (on an element-by-element basis) the reasons why the information would be likely to cause the respondent substantial competitive harm if released to the public would aid in this determination. A new justification does not need to be provided each time information is submitted on the form, if the company has previously submitted a justification for that information and the justification has not changed.

Information on this form is collected for statistical purposes and will not be published by the DOE in individually identifiable form. Information from this form shall be provided to the United States Department of Interior offices: Mineral Management Service and United States Geological Survey for statistical purposes only, in conducting their resource estimation activities.

H. REPORTING STANDARDS

1. Proved Reserves

Proved reserves of oil and gas as of December 31, 1999 are the estimated quantities of oil and/or gas, which geological and engineering data demonstrate with reasonable certainty to be recoverable in future years from known reservoirs under current economic and operating conditions.

Oil and gas reservoirs are considered "proved" if economic producibility is supported by actual production or conclusive formation test (drill stem or wire line), or if economic producibility is supported by core analyses and/or electric or other log interpretations. The area of a reservoir considered "proved" includes: (1) that portion delineated by drilling and defined by gas-oil and/or oil-water contacts, if any; and (2) the immediately adjoining portions not yet drilled, but which can be reasonably judged as economically productive on the basis of available geological and engineering data. In the absence of information on fluid contacts, the lowest known structural occurrence of hydrocarbons controls the lower proved limit of the reservoir.

Reserves which can be produced economically through application of improved recovery techniques (such as fluid injection) are included in the "proved" classification when successful testing by a pilot project, or the operation of an installed program in the reservoir, provides support for the engineering analysis on which the project or program was based.

For natural gas reserves, wet after lease separation, an appropriate reduction in the reservoir gas volume shall be made to cover the removal of the liquefiable portions of the gas in <u>lease and/or field separation facilities</u>, and the removal of nonhydrocarbon gases where they occur in sufficient quantity to render the gas unmarketable.

Estimates of proved reserves do not include the following: (1) oil that may become available from known reservoirs but is reported separately as "indicated additional reserves"; (2) oil and/or gas, the recovery of which is subject to reasonable doubt because of uncertainty as to geology, reservoir characteristics, or economic factors; (3) oil and/or gas that may occur in undrilled prospects; (4) oil that may be recovered from oil shales, coal, gilsonite, and other such sources; and (5) volumes placed in underground storage.

It is not necessary that production, gathering or transportation facilities be installed or operative for a reservoir to be considered proved.

2. Calendar Year Production

Production data are required from all operators. If the actual 1999 production data are not available at the time the Form EIA-23 is prepared, estimate production. Note that amended schedules are not required to correct preliminary production data. Production data reported in the prior year survey may have been subsequently revised or corrected, thereby altering the end of the prior year reserves. Any change in the end of the prior year reserves due to this factor should be accounted for as part of the "Revision Increases" or "Revision Decreases" reported in the current survey. If any properties were acquired during the Calendar Year, production data for the entire year must be reported for those properties.

3. Total Operated Basis

All data on Schedule A (reserves and related data by field) are to be reported on an 8/8ths or Total Operated Basis. When reporting on this basis, production and reserves data are required for the full year, even though the operator of the wells on December 31, 1999 may not have operated those wells for the entire year. Conversely, wells operated by another company on December 31, 1999 are not to be included.

EXAMPLES:

Of the total 8/8ths interest, respondent's share is 50 percent and the associated royalty share is 6.25 percent. Respondent operates property. Respondent reports 100 percent of proved reserves and production.

Of the total 8/8ths interest, respondent's share is zero but he operates the property. Respondent reports 100 percent of proved reserves and production.

4. States and Geographic Subdivisions

The determination of which state or geographic subdivision within which to report proved reserves and production data is based on the location of the field(s) containing the oil and/or gas. If a field overlaps two or more states or subdivisions, the proved reserves data must be subdivided into the appropriate geographic components. Refer to the maps in the **Glossary** for the subdivision boundaries in the States of Alaska, California, Louisiana, New Mexico, and Texas.

Offshore proved reserves data are required separately for the State and Federal domains. If an offshore field lies on or between disputed boundaries, include all data in the State offshore area, and note this fact in a footnote on Schedule R

5. Reporting Units

All volumes are to be reported in the appropriate reporting units as shown below.

a. Crude Oil

All crude oil volumes are to be reported in **thousands of barrels (MBbls)** (42 U.S. gallons per barrel at atmospheric pressure corrected to 60° Fahrenheit) and excluding basic sediment and water.

b. Natural Gas

All natural gas volumes are to be reported in millions of cubic feet (MMCF) at 14.73 psia and 60° Fahrenheit, wet after lease separation.

It is recognized that the operator in many instances has no knowledge of the ultimate reduction of the gas stream produced from his properties which may result from further downstream processing. The operator is requested to report volumes of natural gas which remain after processing through lease and field separation facilities. Volumes of gas that are flared are also considered production.

Operations must segregate most natural gas data into associated-dissolved and nonassociated gas entries (see natural gas, associated-dissolved and natural gas, nonassociated in Section J). For a given reservoir, the gas type should represent the classification as of December 31, 1999. This gas type may differ from the classification reflected in the prior year's Form EIA-23 filing. Use identical "Revision Increases" of one gas type and "Revision Decreases" of the other gas type to record the change in gas type classification.

c. Natural Gas Liquids

The EIA obtains data from gas processing plants separately. Gas volumes reported on Form EIA-23 are not to be corrected for liquids removed by these plants. If you do not know if a field facility through which your gas is processed is currently reporting data to the EIA or not, contact the EIA-23 Coordinator to obtain information on those plants which report.

d. Lease Condensate

All lease condensate volumes are to be reported in **thousands of barrels (MBbls)** (42 U.S. gallons per barrel, at atmospheric pressure corrected to 60° Fahrenheit).

6. Prior Year's Filing

Entries for "Reserves, December 31, 1998" in this year's Form EIA-23 filing should not differ from those quantities reported as end-of-year reserves in the prior year's filing. This procedure represents a change from previous year's instructions. Special situations that can occur are listed below:

a. Properties Were Acquired

If operations were transferred <u>from</u> another company to the respondents during the calendar year, then these reserves will be shown in "Revision Increases" (column (b) on Schedule A). Additionally, a Schedule B footnote must be provided indicating the name of the previous operator, the month in which operations were acquired, and the volume of reserves involved.

b. Properties Were Sold or Transferred

If operations were transferred <u>to</u> another company during the calendar year, then these reserves will be shown in "Revision Decreases" (column (c) on Schedule A). Additionally, a Schedule B footnote must be provided indicating the name of the new operator, the month in which operations were transferred, and the volume of reserves involved. In the event the respondent no longer operates any properties in this field, then the "Reserves, December 31, 1999" (column (h) on Schedule A) would be zero.

c. Gas Type Reclassified

In the case where the type of gas was improperly reported or reclassified from associated-dissolved (AD) to non-associated (NA), or vice-versa, "Reserves, December 31, 1998" for one gas type would include the volume previously reported as the other gas type. Changes should be reported as revision increases or decreases (See Calendar Year Production in Section H.2). Additionally, a Schedule

B footnote must be provided indicating volume of reserves reclassified.

d. First Time Reserve Report

If a respondent reports reserves estimates in the current survey, but not in the prior year's survey, because such estimates were not available in the company records at that time, add column (g), "Calendar Year Production" and column (h), "Reserves December 31, 1999" and enter the sum in column (a), "Reserves December 31, 1998".

7. Schedule Preparation Standards

All schedules submitted should conform to the schedule preparation standards below.

a. Negative and Positive Volumes

All data are to be entered as whole number integers without plus (+) or minus (-) symbols. By definition, "Revision Decreases" and "Production" both constitute reserve decreases, and are entered without the minus symbol.

An unusual situation may occur when, for pressure maintenance, a field is injected with natural gas produced from another field. The resultant increase in proved gas reserves is considered a "Revision Increase" for those volumes that are reasonably expected to be recovered at some future date. A Schedule B footnote must indicate the total injected volume and the expected future recoveries.

b. Rounding

When rounding liquid volumes, round 500 barrels and above up to "1" Mbbl, and less than 500 barrels down to "0." For gas volumes, round 500 Mcf and above up to "1" MMcf, and less than 500 Mcf down to "0" MMcf. Blank entries should not be completed with "0".

Volumes should be reported in whole numbers. Volumes containing decimals should be rounded to the nearest whole number.

c. Collation of Filings

Prior to submission, completed forms must be assembled and paginated consecutively within each schedule in the following order:

- 1. Cover Page.
- Schedule A ... by state, then subdivision within state, in the same sequence as shown in the Location Code list of the Glossary. Field entries should be listed alphabetically by field name within each subdivision, or within each state not having subdivisions. The last Schedule A page is to contain the National Summary total for all reported fields.
- 3. Schedule B (if needed) ... by state, then subdivision within state, in the same sequence as Schedule A.

d. Reproduction

If mechanically reproduced forms are submitted in lieu of originals, they must have been clearly reproduced, must be of identical format and scale (within 3 percent overall dimension) to the provided forms and must have been accurately aligned during the reproduction process. Computer printouts on other than an exact duplicate of the forms provided are not acceptable.

e. Character Set

Responses must be typed or printed in black ink. If you are writing the response by hand, print and use all capital letters. Long hand is unacceptable. The form was designed to be completed using a 10-pitch (Standard Pica) typewriter (identical to a standard IBM train, if you are printing your response by computer) although a 12-pitch machine can be used.

SPECIFIC INSTRUCTIONS

I. OPERATOR IDENTIFICATION AND DETAILED REPORT

This information is to be reported on the Cover Page submitted. You are required to enter those items which are incorrect or missing from the preprinted form.

1. COVER PAGE - Operator Identification

Item Instructions:

Item 1: "Were you an operator ..." - Check the appropriate box

Item 2: This item is for DOE use only.

Items 3 thru 7: Identification - Name, Address, City, State, 9-digit ZIP Code. Enter the legal name and address of the operator. Use standard State abbreviations found on page 17 of the Glossary. If a foreign address, enter city, local equivalent of State name (e.g., province), and country on the second address line.

Item 8: EIN - Enter the operating firm's IRS Employer Identification Number (EIN) if it has one. If the operator does not have an EIN, enter the social security number of the attestor and check the box.

Item 9: Name of Contact Person - This person should be familiar with the data provided, and will be the person to whom inquiries will be directed, if necessary.

Item 10: Telephone Number of the Contact Person - Enter the telephone number of the contact person.

Items 11 thru 16: Parent Company Identification - Name, Address, City, State, 9-digit ZIP Code. Enter the legal name and address of the parent company, if any, which exercises ultimate control over the respondent.

Example: You are Company A, which takes direction from Company B, which in turn takes direction from Company C. Report Company C as the parent company, rather than Company B.

Item 17: Parent Company EIN - Enter the EIN of the parent company, if any.

Item 18: Enter the total number of pages (including the Cover Page but excluding any transmittal letters) of your filing.

Items 19 thru 22: Attestation - Enter the name and title of the individual designated by the respondent company to sign the attestation, and the date of the signing. This report must be sworn to or affirmed by a responsible officer or the office responsible for regulatory filings.

2. SCHEDULE A- Operated Proved Reserves, Production and Related Data Field

All proved reserves, production, and reserve changes data on Schedule A are to be reported on a Total Operated Basis (See **Total Operated Basis** in Section H.3 and J), for each field in which the respondent operated oil and/or gas wells on December 31, 1999, including abandonments during the year. If a field overlaps two or more States or subdivisions, data pertaining to each must be separately reported.

SECTION 1.0: Operator and Report Identification Data

The information in this section is to be reported on each Schedule A submitted.

Item Instructions:

Item 1.1: Operator I.D. Code - If the operator ID from the preprinted form on the Cover Page is incorrect, enter the correct 10-digit number.

Item 1.2: Operator Name - If the name of the operator from the preprinted form on the Cover Page is incorrect, enter the first 35 characters of the operator name. If the name exceeds 35 characters, do not abbreviate, but simply truncate the extra characters from the right.

Item 1.3: Original - Enter an 'X' if this is the first submission of this schedule for the report year. Otherwise, leave blank.

Item 1.4: Amended - Enter an `X' if this schedule amends a previously submitted schedule. Otherwise, leave blank.

Item 1.5: Page – Enter the current page number in this schedule series.

SECTION 2.0: Field Data (Operated Basis)

Production data and estimates of proved reserves of crude oil, natural gas, and lease condensate are required of each operator selected. This survey segregates selected operators into three categories, according to the annual production of hydrocarbons from wells which they operated on December 31, 1999. The three size categories are as follows:

Category I - Large Operators: Operators who produced 1.5 million barrels or more of crude oil, or 15 billion cubic feet or more of natural gas, or both.

Category II - Intermediate Operators: Operators who produced at least 400,000 barrels of crude oil or 2 billion cubic feet of natural gas, or both, but less than Category I operators.

Category III - Small Operators: Operators who produced less than the Category II operators.

Production refers to the total report year production from all domestic oil and/or gas wells you operated on December 31, 1999, including wells abandoned during the year.

Production data and proved reserve estimates are required from all Category I operators. Proved reserves estimates are required from Category II operators. Proved reserves estimates are required from the Category II operators only if such data exist in company records. To the extent that Category II operators do not have proved reserves estimates associated with one or more specific properties, they must report separately their production data according to production from properties for which proved reserves have been estimated, and production from properties for which proved reserves have not been estimated.

Field data blocks, items 2.1 through 2.4, are to be utilized by both the Category I and Category II respondents to report their production and proved reserves at the field level. Category I (Large) operators MAY NOT use Subitem 7 (Production From Reserves Not Estimated) for any data entry. A Category II operator may elect to file as a Category I operator.

All Category II operators are required to complete Subitems 1, 2, 3, 4, and 6. Subitem 11 must also be completed if this information is available. Category II operators who have reserve estimates should complete Columns (a) through (i), Subitems 12 through 15 as appropriate. Category II operators who do not have proved reserve estimates should use Subitem 7, Columns (a) through (d), to report field production data. In the event that the operator has partial reserve estimates for a given field, such Subitem 7 to report production for that portion for which no reserve estimates are available, and Subitems 12 through 15 to report available reserves and associated production data from the remaining part of the field

If it would make your forms preparation easier, a new State or State subdivision may be started in the first field data block of a new Schedule A page. In all other cases, utilize all four field data blocks on each Schedule A. When completing more than one page of Schedule A, do not renumber items 2.1 through 2.4 on successive pages. However, be certain to enter the correct, consecutive page numbers on each page in item 1.5.

Item 2.1 thru 2.4:

Subitem 1: **State Abbreviation** - Enter the two-character alphabetic abbreviation of the State to which data reported for this field pertain. For offshore fields, use the abbreviation of the adjacent state. (See **Geographic Codes** in Section L)

Subitem 2: **Subdivision Code** - Enter the two-digit code of the appropriate geographic subdivision to which data reported for this field pertain; leave blank if not applicable. (See **Geographic Codes** in Section L)

Subitem 3: County Code - For onshore areas, enter the three-digit numeric code for the county or parish in which the field is located, as it appears on the EIA Oil and Gas Field Code Master List (1997 Annual, 1998 Updates or 1999 Updates). Enclosed is a copy of the Oil and Gas Field Code Master List - 1999 Updates publication for all Category I and II operators. This Update and the entire Field Code Master List is available on our website at http://www.eia.doe.gov. After logging on the EIA website, select "Petroleum," then "Data Publications" and then scroll to "Oil and Gas Field Code Master List" under Annual. If the field is located in more than one county, enter the code of the county which contains the largest lease acreage, overlying proved reserves, which you operate. (See County Codes in Section L)

Subitem 4: **Field Code** - Enter the six-digit field identification code as it appears on the EIA *Oil and Gas Field Code Master List (Updates)* - 1999. If you cannot locate the name of the field on the list, or there is substantial doubt as to whether a field identified on the list is the same field for which you are reporting (See **Field Coding Conventions** in Section L), insert UNK001 for the first such field, then UNK002 for the second such field, etc. for this subitem.

Subitem 5: **OCS Block Number** - For offshore field, enter the block number, if it exists, of that offshore block which contains your largest lease acreage, overlying proved reserves. This block number need not be identical to the block number appearing in the field name. If two blocks have equal proved acreage, enter the number of the block having the earliest lease date; arbitrarily choose one block number if multiple answers are still possible given these selection rules. Leave blank if OCS block number is not applicable.

Subitem 6: **Field Name** - Enter the name of the field to which data entered in this data block item pertain. Do not include reservoir names unless they are part of the proper field name. (See **Field Naming Conventions** in Section K)

Subitem 7: Calendar Year Production From Properties For Which Reserves Were Not Estimated - This subitem applies only to Category II operators. In the proper columns, enter volumes produced from properties in this field for which reserve estimates are not available. The volumes reported in this subitem should not be included in the volumes reported in subitems 12-15, Column (g).

Subitem 8: **Footnote** - Enter an 'X' if further explanatory information pertaining to data for this field appears on Schedule B, Footnotes. Leave blank if there is no footnote information.

Subitem 9: **Water Depth** - For an offshore field, enter the average depth of water (from mean sea level to seabed) over the field, in feet. Leave blank if an onshore field.

Subitem 10: **Field Discovery Year** - Enter the calendar year in which the field was discovered. Footnote on Schedule B and check subitem 8 if this represents a change from a previously reported discovery year for this field. Enter 'NA' if not known. (See **Field Discovery Year** in Section J)

Subitem 11: Indicated Additional Reserves of Crude Oil -Enter the estimated volumes of crude oil which may become available through the application of improved recovery techniques. (See Indicated Additional Reserves of Crude Oil in Section J)

Subitem 12: Crude Oil (MBbls)

Subitem 13: Associated-Dissolved Gas (MMCF)

Subitem 14: Nonassociated Gas (MMCF)

Subitem 15: Lease Condensate (MBbls)

Column (a): Reserves, December 31, 1998 - Enter the volumes of proved reserves as of December 31, 1998. (See Proved Reserves of Crude Oil, Proved Reserves of Lease Condensate and Proved Reserves of Natural Gas, Wet After Lease Separation in Section J) (See Section H, Item 6, page 4, for explanation of reserve changes from prior year's filing.)

Column (b): **Revision Increases** - Enter the total of upward revisions made in the field during the calendar year. Explain any total revision increase in excess of 2,500 MBbls of liquid or 15,000 MMCF of gas in a Schedule B footnote and check subitem 8. To the extent that reserves are revised upward due to implementation of secondary or tertiary recovery techniques, such revisions should be indicated by volume and by recovery method in a Schedule B footnote. Also, indicate in a Schedule B footnote the volume of any upward revisions due to the transfer of reserves previously reported as 'Indicated Additional Reserves of Crude Oil' to proved status. (See **Revisions** in Section J.) Increases in reserves as a result of acquisitions should also be shown.

Column (c): **Revision Decreases** - Enter the total of downward revisions made in the field during the calendar year. Do not enter a minus sign as entries in this column are assumed to be negative. Explain any total revision decrease in excess of 2,500 MBbls of liquid or 15,000 MMCF of gas in a footnote on Schedule B and check subitem 8. (See **Revisions** in Section J.) Reserves associated with 1999 property dispositions should also be shown and explanations provided in Schedule B footnote.

Column (d): **Extensions** – If this is an old field, enter the increases to the field's reserves attributable to extensions during the current calendar year. (See **Extensions** in Section J.)

Column (e): **New Field Discoveries** - If the field was discovered during the calendar year 1999, enter the estimated initial volumes of proved reserves attributable thereto (before reducing it by production during the calendar year, if any). See **New Field Discoveries** in Section J.)

Column (f): **New Reservoir Discoveries in Old Fields** - If this is an old field and any new reservoir discoveries were made in it during the calendar year, enter the estimated initial volumes attributable thereto, (before reducing by production during the calendar year, if any). (See **New Field** and **Old Field** in Section J.)

Column (g): Calendar Year Production - Enter the volumes produced from the field during the calendar year. (See Production, Crude Oil, Production, Lease Condensate and Production, Natural Gas, Wet After Lease Separation in Section J.)

Column (h): **Reserves, December 31, 1999** - Enter the volumes of proved reserves as of December 31, 1999. This item should be the algebraic sum of Columns (a) + (b) + (d) + (e) + (f), less Columns (c) and (g). This value should always be equal to or greater than Column (i).

Column (i): **Nonproducing Reserves** - Enter the estimated volumes of <u>proved</u> reserves in the field which were in nonproducing status at the end of the calendar year. This entry is a subset of Column (h) and therefore volumes entered should also be included in volumes reported in Column (h). This includes proved developed nonproducing and proved undeveloped reserves. (See **Nonproducing Reserves** in Section J.)

NATIONAL TOTALS

National totals for each of the volumetric data elements reported on Schedule A are required. After all fields in which you operate have been reported on Schedule A, sum each data element included in subitem 7, 11, and 12 through 15. Enter these national totals in corresponding subitem locations of the first unused field data block, items 2.1 through 2.4. Enter "ZZ" in subitem 1 and "NATIONAL TOTALS" in subitem 6 to identify these data as national summary totals.

3. SCHEDULE B - Footnotes

At a minimum, submit footnotes in clarification of reported data items when required to do so by the instructions for the applicable schedule. This includes sales or acquisitions of properties during the calendar year 1999. Additionally, you may footnote any other reported item if this will enhance its clarity.

SECTION 1.0: Operator and Report Identification Data

This information is to be reported for each Schedule B submitted.

Item Instructions:

- **Item 1.1: Operator I.D. Code** If the operator ID from the preprinted form on the Cover Page is incorrect, enter into this space the correct 10-digit operator code. If no code has been assigned to you, leave this space blank.
- Item 1.2: Operator Name If the operator name from the preprinted form on the Cover Page is incorrect, enter the first 35 characters of the operator name. If the name exceeds 35 characters, do not abbreviate, but simply truncate the extra characters from the right.
- **Item 1.3: Original** Enter an 'X' if this is the first submission of this schedule for the calendar year. Otherwise, leave blank.
- **Item 1.4: Amended** Enter an 'X' if this schedule amends a previously submitted schedule. Otherwise leave blank.
- Item 1.5: Page Enter the current page number in this schedule series.

SECTION 2.0: Footnote Data

Use all lines on each Schedule B page before using additional pages. Columns (a) thru (d) must be filled in only for the first line of each footnote.

- Column (a): **Page Number** Enter the page number that is referenced by this footnote.
- Column (b): **Item Number** Enter the item number that is referenced by this footnote.
- Column (c): **Subitem Number** Enter the subitem number (1 thru 15) that is referenced by this footnote. Leave blank if not applicable.
- Column (d): **Column Designation** Enter the column designation (alphabetic character) that is referenced by the footnote, if applicable. Otherwise leave blank.
- Column (e): **Sequence Number** Enter the line number of this line of the footnote. Begin with '1' and increase this number one unit with each successive line of the footnote. Always revert to '1' with each new footnote.
- Column (f): **Notation** Enter the text of the footnote, using as many lines as necessary.

GLOSSARY AND CODES

J. DEFINITIONS

The definitions contained herein have been formulated with reference to the particular purposes to be served by Form EIA-23. They are not necessarily synonymous with the same or similar terms as used in DOE regulations, and are not to be constructed as definitions applicable for any purposes other than the collection and reporting of data on Form EIA-23.

Affiliated (Associated) Company: An "affiliate" of, or a person "affiliated" with, a specific person is a person that directly, or indirectly through one or more intermediaries: controls, is controlled by; or is under common control with, the person specified. (See **Person** and **Control**)

Control: The term "control" (including the terms "controlling," "controlled by" and "under common control with") means the possession, direct or indirect, of the power to direct or cause the direction of the management and policies of a person, whether through the ownership of voting shares, by contract, or otherwise. (See **Person**)

Corrections: (See Revisions)

Crude Oil: A mixture of hydrocarbons that exists in the liquid phase in natural underground reservoirs and remains liquid at atmospheric pressure after passing through surface separating facilities.

Crude oil may also include:

- Small amounts of hydrocarbons that exist in the gaseous phase in natural underground reservoirs but are liquid at atmospheric pressure after being recovered from oil well (casinghead) gas in lease separators, and that subsequently are commingled with the crude stream without being separately measured.
- 2. Small amounts of nonhydrocarbons produced with the oil.

When a State regulatory agency specifies a definition of crude oil which differs from that set forth above, the State definition is followed and its use footnoted on Schedule B of Form EIA-23.

Extensions: The reserves credited to a reservoir because of enlargement of its proved area. Normally, the ultimate size of newly discovered fields, or newly discovered reservoirs in old fields, is determined by wells drilled in years subsequent to discovery. When such wells add to the proved area of a previously discovered reservoir, the increase in proved reserves is classified as an extension.

Field: An area consisting of a single reservoir or multiple reservoirs all grouped on, or related to, the same individual geological structural feature and/or stratigraphic condition. There may be two or more reservoirs in a field which are separated vertically by intervening impervious strata, or laterally by local geologic barriers, or by both.

Field Area: A geographic area encompassing two or more pools that have a common gathering and metering system, the reserves of which are reported as a single unit. This concept applies primarily to the Appalachian region. (See **Pool**)

Field Discovery Year: The calendar year in which a field was first recognized at containing economically recoverable accumulations of oil and/or gas.

Field Separation Facility: A surface installation designed to recover lease condensate from a produced natural gas stream usually originating from more than one lease, and managed by the operator of one or more of these leases. (See **Lease Condensate**)

Gross Working Interest Ownership Basis: Gross working interest ownership is the respondent's working interest in a given property plus the proportionate share of any royalty interest, including overriding royalty interest, associated with the working interest. (See Working Interest and Royalty [Including Overriding Royalty] Interest)

Indicated Additional Reserve of Crude Oil: Quantities of crude oil (other than proved reserves) which may become economically recoverable from existing productive reservoirs through the application of improved recovery techniques using current technology.

These recovery techniques may:

- Already be installed in the reservoir, but their effects are not yet known to the degree necessary to classify the additional reserves as proved; or
- Be installed in another similar reservoir, where the results of that installation can be used to estimate the indicated additional reserves.

Indicated additional reserves are not included in proved reserves due to their uncertain economic recoverability. When economic recoverability is demonstrated, the indicated additional reserves must be transferred to proved reserves as positive revisions.

Lease Condensate: A mixture consisting primarily of pentanes and heavier hydrocarbons which is recovered as a liquid from natural gas in lease or field separation facilities, exclusive of products recovered at natural gas processing plants or facilities, the output of which is reported on Form EIA-64A, "Annual Report of the Origin

of Natural Gas Liquids Production," and Form EIA-816, "Monthly Natural Gas Liquids Report."

Lease Separator: A facility installed at the surface for the purpose of (a) separating gases from produced crude oil and water at the temperature and pressure conditions of the separator, and/or (b) separating gases from that portion of the produced natural gas stream which liquefies at the temperature and pressure conditions of the separator.

Natural Gas: A mixture of hydrocarbon compounds and small quantities of various nonhydrocarbons existing in the gaseous phase or in solution with crude oil in natural under-ground reservoirs at reservoir conditions. The principal hydrocarbons usually contained in the mixture are methane, ethane, propane, butane, and pentanes. Typical nonhydrocarbon gases which may be present in reservoir natural gas are carbon dioxide, helium, hydrogen sulfide, and nitrogen. Under reservoir conditions, natural gas and the liquefiable portions occur either in a single gaseous phase in the reser-voir or in solution with crude oil, and are not distinguishable at the time as separate substances. (See Natural Gas, Nonassociated and Natural Gas, Associated)

Natural Gas, Associated-Dissolved: The combined volume of natural gas which occurs in crude oil reservoirs either as free gas (associated) or as gas in solution with crude oil (dissolved).

Natural Gas, Nonassociated: Natural gas not in contact with significant quantities of crude oil in a reservoir.

Natural Gas, Processing Plant: A facility designed to recover natural gas liquids from a stream of natural gas which may or may not have passed through lease separators and/or field separation facilities. Another function of natural gas processing plants is to control the quality of the processed natural gas stream. Cycling plants are considered natural gas processing plants.

National Gas, Wet After Lease Separation: The volume of natural gas remaining after removal of lease condensate in lease and/or field separation facilities, if any, and after exclusion of nonhydrocarbon gases where they occur in sufficient quantity to render the gas unmarketable. Natural gas liquids may be recovered from volumes of natural gas, wet after lease separation, at natural gas processing plants. (See Lease Condensate, Separator, and Field Separation Facility)

New Field: A field discovered during the calendar year.

New Field Discoveries: The volumes of proved reserves of crude oil, natural gas and/or lease condensate discovered in new fields during the calendar year.

New Reservoir: A reservoir discovered during the calendar year.

New Reservoir Discoveries in Old Fields: The volumes of proved reserves of crude oil, natural gas, and/or natural

gas liquids discovered during the calendar year in new reservoir(s) located in old fields.

Nonproducing Reserves: Reservoirs in which proved liquid or gaseous hydrocarbon reserves have been identified, but which did not produce during the last calendar year regardless of the availability and/or operation of production, gathering, or transportation facilities.

Old Field: A field discovered prior to the calendar year.

Old Reservoir: A reservoir discovered prior to the calendar year.

Operator: The person responsible for the management and day-to-day operation of one or more crude oil and/or natural gas wells as of December 31, 1998. The operator is generally a working interest owner or a company under contract to the working interest owner(s). Wells included are those which have proved reserves of crude oil, natural gas, and/or lease condensate in the reservoirs associated with them, whether or not they are producing. Wells abandoned during 1998 are also to be considered "operated" as of December 31, 1999. (See Person, Proved Reserves of Crude Oil, Proved Reserves of Natural Gas, Proved Reserves of Lease Condensate, Report Year, and Reservoir)

Ownership: (See Gross Working Interest Ownership Basis)

Parent Company: The parent company of a business entity is an affiliated company which exercises ultimate control over that entity, either directly or indirectly through one or more intermediaries. (See **Affiliated [Associated] Company** and **Control**)

Person: An individual, a corporation, a partnership, an association, a joint-stock company, a business trust, or an unincorporated organization.

Pool: In general, a reservoir. In certain situations a pool may consist of more than one reservoir. (See **Field Area**)

Production, Crude Oil: The volumes of crude oil which are extracted from oil reservoirs during 1999. These volumes are determined through measurement of the volumes delivered from lease storage tanks, or at the point of custody transfer, with adjustment for (1) net differences between opening and closing lease inventories, and for (2) basic sediment and water. Crude oil used on the lease is considered production.

Production, Lease Condensate: The volume of lease condensate produced during 1999. Lease condensate volumes include only those volumes recovered from lease or field separation facilities. (See **Lease Condensate**)

Production, Natural Gas, Wet After Lease Separation: The volume of natural gas with-drawn from reservoirs during the calendar year less (1) the volume returned to such reservoirs in cycling, repressuring of oil reservoirs and conservation operations; less (2) shrinkage resulting from the removal of lease condensate; and less (3) nonhydrocarbon gases where they occur in sufficient quantity to render the gas unmarketable. Volumes of gas withdrawn from gas storage reservoirs and native gas, which has been transferred to the storage category, are not considered production. Flared and vented gas is also considered production and should be included in the volumes reported.

Proved Reserves of Crude Oil: Proved reserves of crude oil as of December 31, 1999 are the estimated quantities of all liquids defined as crude oil, which geological and engineering data demonstrate with reasonable certainty to be recoverable in future years from known reservoirs under existing economic and operating conditions.

Reservoirs are considered proved if economic producibility is supported by actual production or conclusive formation test (drill stem or wire line), or if economic producibility is supported by core analyses and/or electric or other log interpretations. The area of an oil reservoir considered proved includes (1) that portion delineated by drilling and defined by gas-oil and/or oilwater contacts, if any; and (2) the immediately adjoining portions not yet drilled, but which can be reasonably judged as economically productive on the basis of available geological and engineering data. In the absence of information on fluid contacts, the lowest known structural occurrence of hydrocarbons is considered to be the lower proved limit of the reservoir.

Volumes of crude oil placed in underground storage are not considered proved reserves.

Reserves of crude oil which can be produced economically through application of improved recovery techniques (such as fluid injection) are included in the "proved" classification when successful testing by a pilot project, or the operation of an installed program in the reservoir, provides support for the engineering analysis on which the project or program was based.

Estimates of proved crude oil reserves do not include the following: (1) oil that may become available from known reservoirs but is reported separately as "indicated additional reserves"; (2) natural gas liquids (including lease condensate); (3) oil, the recovery of which is subject to reasonable doubt because of uncertainty as to geology, reservoir characteristics, or economic factors; (4) oil that may occur in undrilled prospects; and (5) oil that may be recovered from oil shales, coal, gilsonite, and other such sources. It is not necessary that production, gathering, or transportation facilities be installed or operative for a reservoir to be considered proved.

Proved Reserves of Lease Condensate: Proved reserves of lease condensate as of December 31, 1999 are the volumes of lease condensate expected to be recovered in future years in conjunction with the production of proved reserves of natural gas as of December 31, 1999, based on the recovery efficiency of lease and/or field separation facilities installed as of December 31, 1999. (See Lease Condensate and Proved Reserves of Natural Gas)

Proved Reserves of Natural Gas, Wet After Lease Separation: Proved reserves of natural gas as of

December 31, 1999 are the estimated quantities which analysis of geologic and engineering data demonstrate with reasonable certainty to be recoverable in future years from known reservoirs under existing economic and operating conditions. Reservoirs are considered proved if economic producibility is supported by actual production or conclusive formation test (drill stem or wire line), or if economic producibility is supported by core analyses and/or electric or other log interpretations.

The area of a gas reservoir considered proved includes: (1) that portion delineated by drilling and defined by gasoil and/or gas-water contacts, if any; and (2) the immediately adjoining portions not yet drilled, but which can be reasonably judged as economically productive on the basis of available geological and engineering data. In the absence of information on fluid contacts, the lowest known structural occurrence of hydrocarbons is considered to be the lower proved limit of the reservoir.

Volumes of natural gas placed in underground storage are not considered proved reserves.

For natural gas reserves, wet after lease separation, an appropriate reduction in the reservoir gas volume must be made to cover the removal of the liquefiable portions of the gas in lease and/or field separation facilities and the exclusion of nonhydrocarbon gases where they occur in sufficient quantity to render the gas unmarketable.

It is not necessary that production, gathering, or transporta-tion facilities be installed or operative for a reservoir to be considered proved. It is to be assumed that compression will be initiated if and when economically justified.

Report Year: The calendar year to which data reported on this form pertain.

Reserves: (See Proved Reserves)

Reserves Changes: Positive and negative revisions, extensions, new reservoir discoveries in old fields, and new field discoveries, which occurred during the calendar year.

Reservoir: A porous and permeable underground formation containing an individual and separate natural accumulation of producible hydrocarbons (oil and/or gas) which is confined by impermeable rock or water barriers and is characterized by a single natural pressure system.

Revisions: Changes to prior year-end proved reserves estimates, either positive or negative, resulting from new information other than an increase in proved acreage (extension). Revisions include increases of proved reserves associated with the installation of improved recovery techniques or equipment and property acquisitions. They also include correction of prior calendar year arithmetical or clerical errors and adjustments to prior year-end production volumes to the extent that these alter previous reserves estimates. Property dispositions would decrease the previously reported proved reserves.

Royalty (Including Overriding Royalty) Interests: These interests entitle their owner(s) to a share of the

mineral production from a property or to a share of the proceeds from a property. They do not contain the rights and obligations of operating the property, and normally do not bear any of the costs of exploration, development, and operation of the property.

Subdivision: A prescribed portion of a given State or other geographical region defined in this publication for statistical reporting purposes.

Subsidiary Company: A company which is controlled through the ownership of voting stock, or a corporate joint venture in which a corporation is owned by a small group of businesses as a separate and specific business or project for the mutual benefit of the members of the group. (See **Control**)

Working Interest: A working interest permits the owner(s) to explore, develop, and operate a property. The working interest owner(s) bear(s) the costs of exploration, development and operation of the property, and in return is (are) entitled to a share of the mineral production from the property or to a share of the proceeds from the property.

Total Operated Basis: The total reserves or production associated with the wells operated by an individual operator. This is also commonly known as the "gross operated" or "8/8ths" basis.

K. FIELD NAMING AND CODING CONVENTIONS

A copy of the EIA *Oil and Gas Field Code Master List Updates – 1999* is enclosed for all Category I and Category II operators. This update and the entire *Oil and Gas Field Code Master List* are also available on our website at http://www.eia.doe.gov. After logging on the EIA website, select "Petroleum," then "Data Publications" and then scroll to "Oil and Gas Field Code Master List" under Annual. Please consult this publication for the appropriate State, county and field codes and spelling conventions for field names.

1. Field Naming Conventions

Field naming conventions are used to provide a standard nomenclature for each geologic field, which is recognizable to both the personnel working with the EIA-23 form and the computer system, and fits into 26 characters. In most instances, field names should reflect the conventions imposed by State oil and gas regulatory agencies. (See *Oil and Gas Field Code Master List* (1997 Annual or 1998 Updates and/or EIA website), Table 1. List of Authorities for Naming Oil and Gas Fields.) Field names which have come into general acceptance in an area may be used, unless they have been specifically altered or replaced by the appropriate naming authority. Also, field names used strictly by one company must give precedence to the State recognized name.

Exceptions occur for names of fields located in Texas and New Mexico, in which States the regulatory agencies consider geologic reservoirs to be "fields." For example, in Texas, Parker (Pennsylvanian) and Parker (Wolfcamp) are considered separate fields by the State. In actuality, Parker is the name of the geologic field and Pennsylvanian and Wolfcamp are reservoir names of the geologic reservoirs in the field (by Texas Railroad Commission convention, the geologic reservoir name appears in parentheses after the geologic field name). For the purpose of reporting names on Schedule A of form EIA-23, only the geologic field name should be used. In the example above, "PARKER" would be entered as the field name, subitem 6, in the field data block of Schedule A. Some specific conventions include the following:

a. Offshore field names usually (but not always) consist of a basic offshore area name and block number specified by the U.S. Minerals Management Service. Example: East Cameron South addition Block 265. If offshore area names must be abbreviated to fit within 26 characters allowed, the following standard abbreviations should be used:

Name	Code	Name	Code
NORTH	Ν	NORTH ADDITION	NA
SOUTH	S	SOUTH ADDITION	SA
EAST	Ε	EAST ADDITION	EA
WEST	W	WEST ADDITION	WA
BLOCK	BLK	SOUTH EXTENSION	SX
ISLAND	IS	EAST EXTENSION	EX

For example, High Island East Addition South Extension Block A-375 should be abbreviated as follows:

HIGH IS EA SX BLK A-375.

- b. Such abbreviations should not be applied to names of onshore fields (except for non-cardinal compass points such as NW for northwest or SE for southeast). If an onshore field name is too long to fit in the allotted space, truncate it on the right and provide the full name on Schedule B.
- c. Compass point words used in field names are to be placed at the end of the field name (i.e. Three Mile Creek North). Exceptions are made for geographic places, such as East Texas field of East Texas or East Branch, a field named for East Branch, Pennsylvania.
- d. Special attention should be given to reporting field names in Michigan. Most fields have the section, township and range after the field name. For example: Kalkaska 12-27N-7W. Operators should report field name as indicated.
- e. If a field that has been reported in the previous year is aliased to another field according to the field code publication, report the data under the new field name. For example, Mud Spring is an alias of Four Mile Creek. All data that was previously reported under Mud Spring should now be reported under Four Mile Creek.

f. Lease names are not acceptable in lieu of geologic field names. To determine the field name for a particular lease, contact the EIA-23 Field Coordinator at 1-800-879-1470, the state geologic survey or conservation commission. If a field name cannot be determined, report the field name as "unknown."

Any names other than official EIA field names will be researched during routine editing of Form EIA-23 data.

2. Field Coding Conventions

Field codes are to be entered on Schedule A for all fields reported by Category I and Category II respondents. The field names and corresponding six-digit code are contained in the EIA *Oil and Gas Field Code Master List* (1997 Annual, 1998 Updates or 1999 Updates and/or EIA website). If a field for which you are reporting does not appear on the Master List, enter UNK001 or UNK002 for the field code and enter the field name and location information. Please use Schedule B - Footnotes for such clarifying data as may allow us to properly identify fields not on the Master List.

L. LOCATION CODES

Wherever applicable, the following codes are those specified as in the EIA *Oil and Gas Field Code Master List* (1997 Annual, 1998 Updates or 1999 Updates and/or EIA website).

1. Geographic Codes

The following State abbreviations and geographic subdivision codes should be used in Schedule A, subitems 1 and 2 of Items 2.1 through 2.4.

State and geographic codes are to be entered on Schedule A for all fields reported by Category I and Category II respondents. The State and geographic subdivision names and corresponding codes are contained in the EIA *Oil and Gas Field Code Master List* (1997 Annual, 1998 Updates or 1999 Updates and/or EIA website). If a field for which you are reporting does not appear on the Master List, enter UNK001 or UNK002, etc. for the field code and enter the field name, county name and state location information in Schedule A. Please use Schedule B - Footnotes for such clarifying data as may allow us to properly identify fields not on the Master List.

2. County Codes

The county codes should be used in Schedule A, subitem 3 of Items 2.1 through 2.4. County codes are to be entered on Schedule A for all fields reported by Category I and Category II respondents. The county names and corresponding three-digit code are contained in the EIA Oil and Gas Field Code Master List (1997 Annual, 1998 Updates or 1999 Updates and/or EIA website) publication. If a field for which you are reporting does not appear on the Master List, enter UNK001 or UNK002, etc. for the field code and and enter the field name, county name and state location information in Schedule B. Please use Schedule B - Footnotes for such clarifying data as may allow us to properly identify fields not on the Master List.

There are no counties in Alaska. Census Divisions have been used to locate oil and gas fields in the past. However, these Divisions are subject to change every 10 years. Therefore, pseudo-county codes as defined by the American Petroleum Institute (API) are to be used for Form EIA-23 reporting. The API pseudo-county codes are used by the State of Alaska and are generally accepted within the industry. They correspond to Universal Transverse Mercator 1 degree by 3 degree quadrangles. Each quadrangle is assigned a 3-digit code which should be entered in the county code blank. See the map of Alaska for the location of the quadrangles.

The EIA-23 Coordinator can be contacted at 1-800-879-1470 for assistance with both county codes and the Alaska codes.

State Abbreviation and Geographic Subdivision Codes

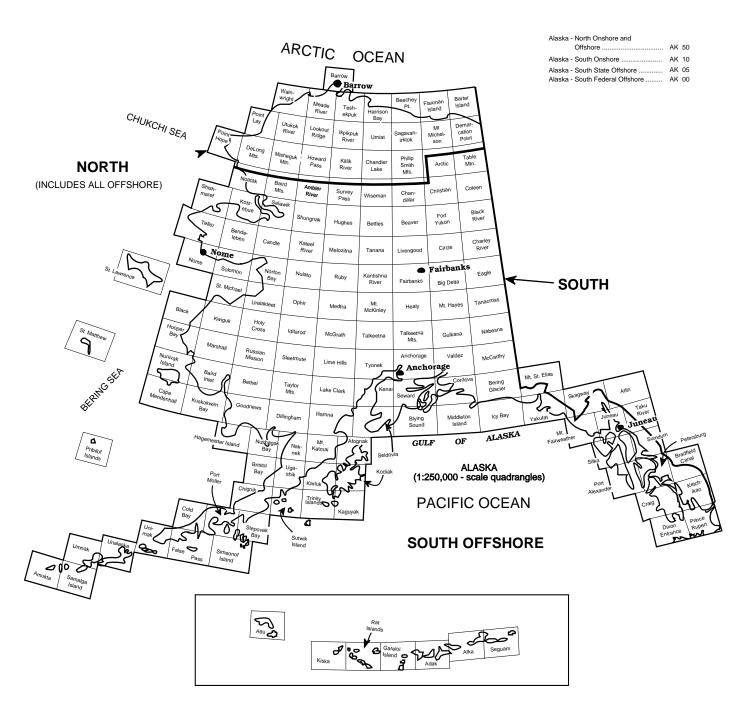
State Name and Geographic Subdivisions ¹	State Abbreviation	Subdivision	4	division eviation	Codo
State Name and Geographic Subdivisions	Abbreviation	Code	State Name and Geographic Subdivisions Abbre	eviation	Code
Alaska - South State Offshore ²	. AK	05	Michigan	MI	Blank
Alaska - South Onshore		10	Minnesota	MN	Blank
Alaska - North Onshore and Offshore ³	. AK	50	Missouri	MO	Blank
Alabama - Onshore		Blank	Mississippi - Onshore	MS	Blank
Alabama - State Offshore ²	. AL	05	Mississippi - State Offshore ²	MS	05
Arkansas	. AR	Blank	Montana	MT	Blank
Arizona		Blank	North Carolina	NC	Blank
California - State Offshore ²	. CA	05	North Dakota	ND	Blank
California - San Joaquin Basin Onshore		10	Nebraska	NE	Blank
California - Coastal Region Onshore	. CA	50	New Hampshire	NH	Blank
California - Los Angeles Basin Onshore	. CA	90	New Jersey	NJ	Blank
Colorado		Blank	New Mexico - East	NM	10
Connecticut	. CT	Blank	New Mexico - West	NM	50
District of Columbia	. DC	Blank	Nevada	NV	Blank
Delaware	. DE	Blank	New York	NY	Blank
Federal Offshore - Atlantic	. AC	00	Ohio	ОН	Blank
Federal Offshore - Gulf of Mexico			Oklahoma	OK	Blank
(Alabama)	. AL	00	Oregon	OR	Blank
Federal Offshore - Gulf of Mexico			Pennsylvania	PA	Blank
(Florida)	. FL	00	Rhode Island	RI	Blank
Federal Offshore - Gulf of Mexico			South Carolina	SC	Blank
(Louisiana)	. LA	00	South Dakota	SD	Blank
Federal Offshore - Gulf of Mexico			Tennessee	TN	Blank
(Mississippi)	. MS	00	Texas - State Offshore ²	TX	05
Federal Offshore - Gulf of Mexico			Texas - Railroad Commission District 1	TX	10
(Texas)		00	Texas - Railroad Commission District 2		
Federal Offshore - Pacific (Alaska)		00	Onshore	TX	20
Federal Offshore - Pacific (California)		00	Texas - Railroad Commission District 3		
Federal Offshore - Pacific (Oregon)		00	Onshore	TX	30
Federal Offshore - Pacific (Washington)		00	Texas - Railroad Commission District 4		
Florida - Onshore		Blank	Onshore	TX	40
Florida - State Offshore ²		05	Texas - Railroad Commission District 5	TX	50
Georgia		Blank	Texas - Railroad Commission District 6	TX	60
Hawaii		Blank	Texas - Railroad Commission District 7B	TX	70
lowa		Blank	Texas - Railroad Commission District 7C	TX	75
Idaho		Blank	Texas - Railroad Commission District 8	TX	80
Illinois		Blank	Texas - Railroad Commission District 8A	TX	85
Indiana	. IN	Blank	Texas - Railroad Commission District 9	TX	90
Kansas		Blank	Texas - Railroad Commission District 10	TX	95
Kentucky		Blank	Utah	UT	Blank
Louisiana - South State Offshore ²		05	Virginia	VA	Blank
Louisiana - South Onshore		10	Vermont	VT	Blank
Louisiana - North		50	Washington	WA	Blank
Massachusetts		Blank	Wisconsin	WI	Blank
Maryland		Blank	West Virginia	WV	Blank
Maine	. ME	Blank	Wyoming	WY	Blank
			National Totals	ZZ	Blank

¹ Refer to maps for subdivision boundaries in the States of Alaska, California, Louisiana, New Mexico and Texas.

² If you are not certain whether an offshore field lies in the Federal or the State domain, assume that it lies in the State domain and indicate this in a footnote in Schedule B.

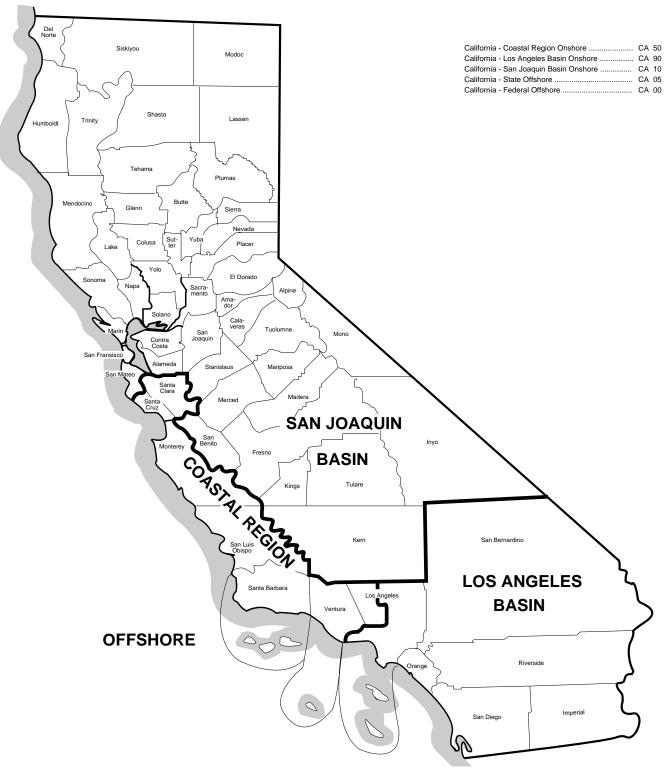
 $^{^{\}rm 3}\,{\rm Alaska}$ - North Onshore and Offshore includes both State and Federal domain.

MAPS OF SELECTED STATE SUBDIVISIONS



Source: After U.S. Geological Survey

Alaska Subdivisions and U.S. Geological Survey Quadrangles



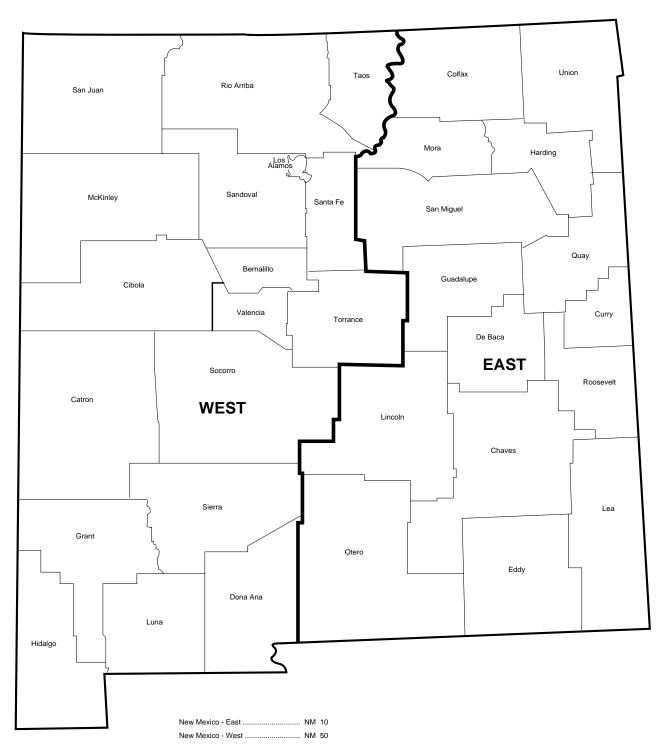
Source: Energy Information Administration, Office of Oil and Gas.

Subdivisions of California



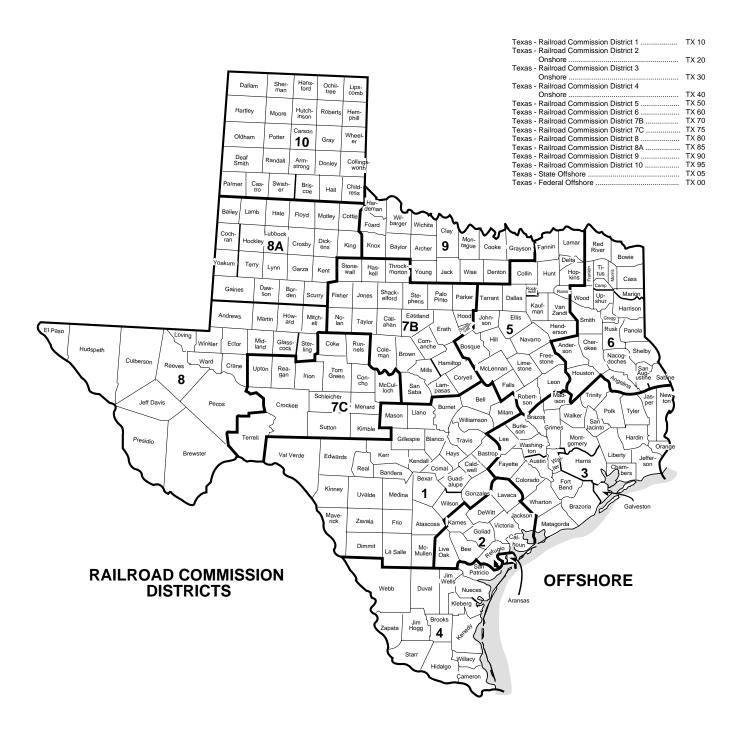
Source: Energy Information Administration, Office of Oil and Gas

Subdivisions of Louisiana



Source: Energy Information Administration, Office of Oil and Gas

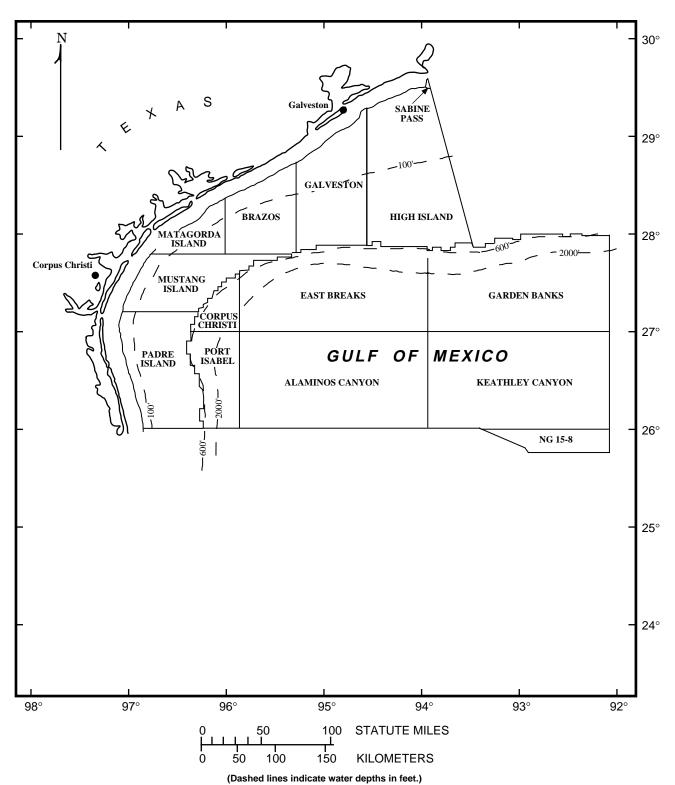
Subdivisions of New Mexico



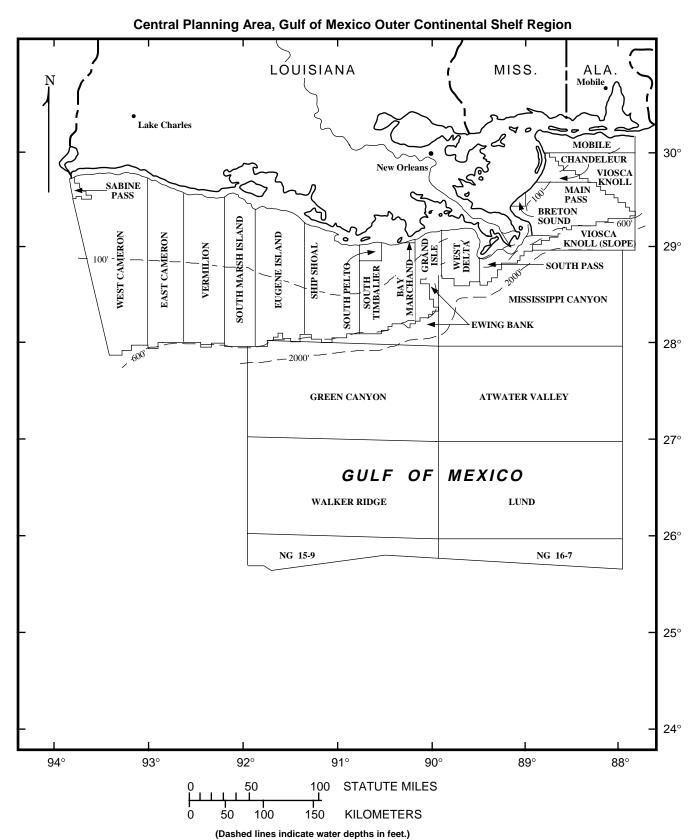
Source: Energy Information Administration, Office of Oil and Gas.

Subdivisions of Texas

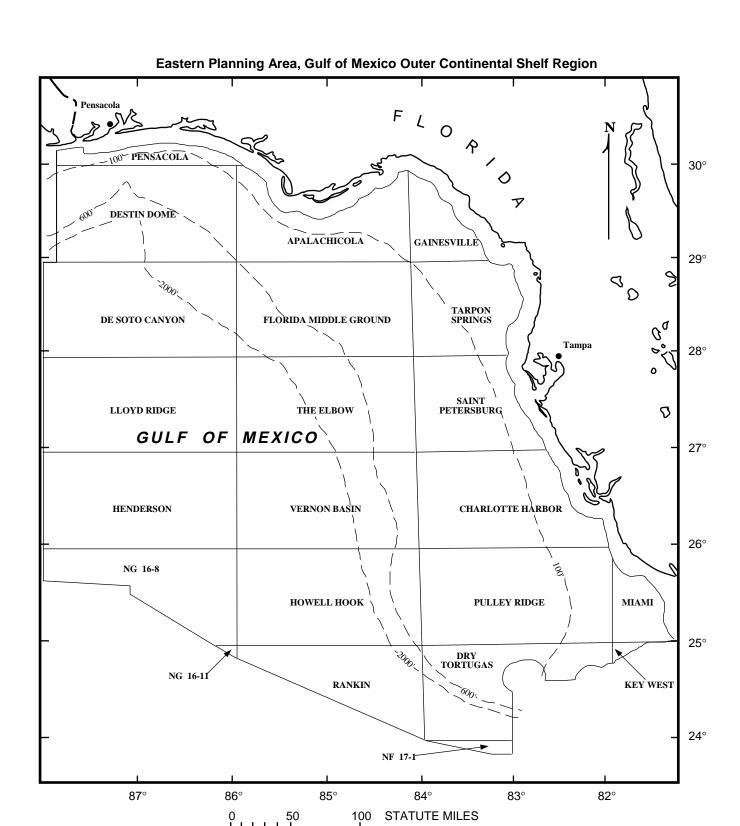
Western Planning Area, Gulf of Mexico Outer Continental Shelf Region



Source: After Minerals Management Service, U.S. Department of the Interior



Source: After Minerals Management Service, U.S. Department of the Interior



(Dashed lines indicate water depths in feet.)

Source: After Minerals Management Service, U.S. Department of the Interior.

KILOMETERS